

**more
durable
control
of peptic
ulcer**

Librax

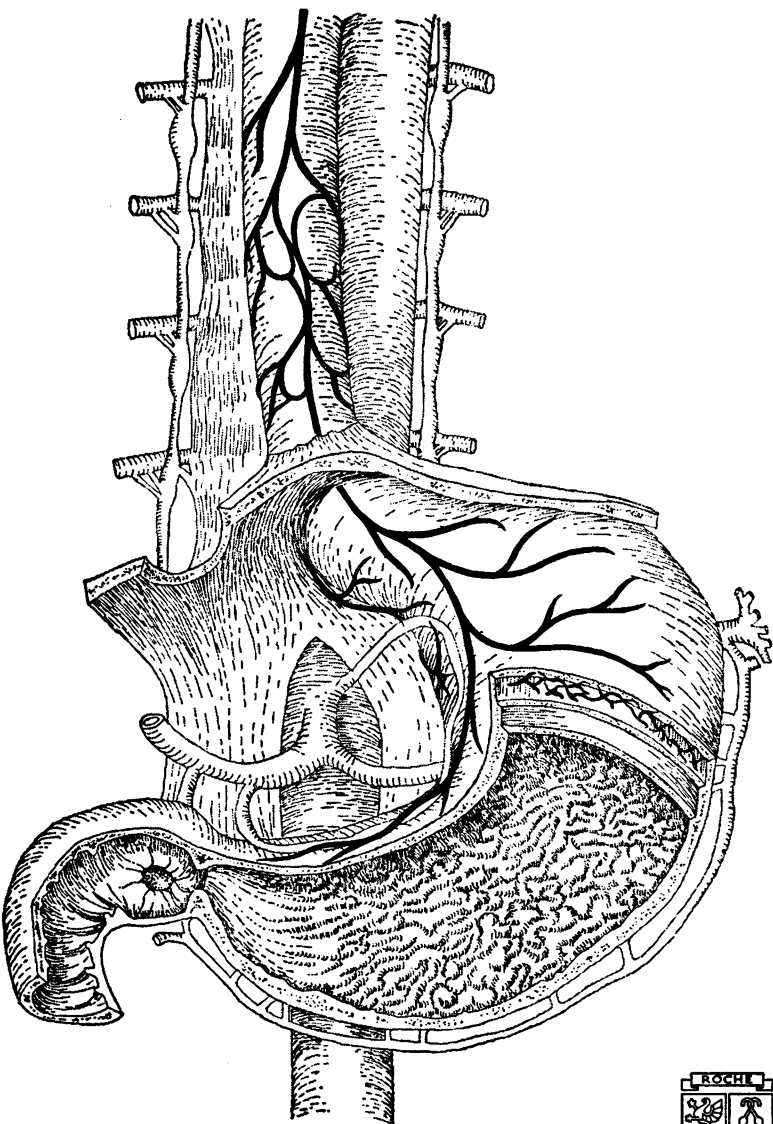
Each capsule contains

**5 mg chlordiazepoxide HCl
and 2.5 mg clidinium Br.**

The diagnosis of a "psycho-visceral" disease—of which peptic ulcer is the classic example—clearly indicates the scope of treatment required for its effective, durable control. The aggravating emotional components as well as the physical factors must be corrected.

Librax provides this integrated therapeutic approach, offering durable control that is conducive to ulcer healing. With Librax, the anxiety and tension characteristic of the ulcer personality are reduced, and at the same time hypersecretion and hypermotility of the gastrointestinal tract are suppressed. Thus, the self-perpetuating cycle of emotional stress/pain or ulceration/emotional stress is interrupted—and with Librax this relief of psycho-visceral symptoms can be prolonged because of minimal side effects.

Usual adult dosage: 1-2 capsules 4 times daily, before meals and at bedtime. ☐ **Side effects:** Drowsiness, sedation and muscle weakness, generally dose-related, have been occasionally encountered, usually in debilitated or geriatric patients. Dryness of the mouth, blurring of vision, urinary hesitancy and constipation may occur. When Librium (chlordiazepoxide HCl) has been used alone, paradoxical reactions, i.e., excitement, stimulation, elevation of affect and acute rage, have been reported in psychiatric patients; these may be secondary to relief of anxiety and may occur in the early stages of therapy. Other side effects with Librium (chlordiazepoxide HCl), usually dose-related, have included isolated instances of minor skin rashes, minor menstrual irregularities, nausea, constipation, increased and decreased libido. ☐ **Precautions:** Contraindicated in glaucoma. In elderly and debilitated patients, limit dosage to smallest effective amount to avoid ataxia or oversedation (not more than 2 Librax capsules daily, initially, increased gradually as needed and tolerated). In patients with prostatic hypertrophy the possibility of urinary retention should be kept in mind. Until maintenance dosage is established, patients should be advised against possibly hazardous procedures requiring complete mental alertness, acute vision and physical coordination. Careful consideration should be given to the pharmacology of any agents to be employed with Librax—particularly the MAO inhibitors and phenothiazines. Observe precautions in impaired renal or hepatic function. ☐ **How supplied:** Each capsule contains 5 mg chlordiazepoxide HCl (contained in Librium®) and 2.5 mg clidinium Br (contained in Quarzan®). Bottles of 50 and 500.



most handkerchiefs agree:



life for the allergy patient is easier with

'PERAZIL'[®] brand **CHLORCYCLIZINE HYDROCHLORIDE**

USES: Relieves the symptoms of sneezing, "incessant" itching, inflamed eyes, rhinorrhea, itching eyes, nose and throat, associated with:

*Hay Fever • Pollenosis • Pruritus
• Urticaria • Vasomotor Rhinitis •
Allergic Dermatitis • Drug Sensitivity*

ADVANTAGES: Both prompt and prolonged in effect, providing symptomatic relief lasting 12 to 24 hours from a single dose.

PRECAUTION: When drowsiness does occur, it is generally mild and the usual precautions should be observed. No toxic effects related to either the blood-forming

organs or the cardiovascular system are produced.

DOSAGE: Adults and children over 8 years, 50 mg. once or twice daily as required. The dose may be increased in severe cases.

Children from 2 to 8 years, 25 mg. (one sugar-coated tablet) once daily.

Infants up to 2 years, 12½ mg. (one quarter of a 50 mg. tablet) crushed and mixed with a spoonful of jam or syrup.

SUPPLIED: Tablets of 25 mg., sugar-coated, bottles of 100 and 1000; Tablets of 50 mg., scored, bottles of 100 and 1000.

Complete literature available on request from Professional Services Dept. PML.



BURROUGHS WELLCOME & CO. (U. S. A.) INC., Tuckahoe, New York

In colds
and
sinusitis
unsurpassed
in providing
drainage
space
without
chemical
harm



The clogged sinus
In sinusitis, the mucous membrane becomes hyperemic and edematous, lymph glands and goblet cells hyperactive. Ostium is closed by edema and secretions cannot drain freely.

The normal sinus
Magnified anatomy of a portion of maxillary sinus showing mucous membrane with cilia and lymph glands. Ostium is normal and patent.

NEO-SYNEPHRINE[®]

brand of phenylephrine hydrochloride hydrochloride

NASAL SPRAYS AND SOLUTIONS

When there is nasal turgescence, tiny orifices of sinus ostia tend to clog. Neo-Synephrine nasal solutions and sprays reduce edematous tissues on contact to provide prompt relief. As turbinates shrink, obstructed sinus ostia open, drainage and breathing become freer and the boggy feeling of a cold disappears.

Delicate respiratory tissue and its natural defenses are not harmed by exceptionally bland Neo-Synephrine; systemic effects are nil; it does not sting. For years it has been recommended for prevention and treatment of sinusitis.¹⁻³ Repeated applications do not lessen effectiveness.

Available in plastic nasal sprays for adults ($\frac{1}{2}\%$) and children ($\frac{1}{4}\%$), in dropper bottles of $\frac{1}{8}$, $\frac{1}{4}$ or 1 per cent.

1. Grant, L. E.: Coryza and nasal sinus infections, *Clin. Med. & Surg.* 42:121, March, 1935. 2. Putney, F. J.: Sinus infection, in Conn, H. F. (Ed.): *Current Therapy* 1952, Philadelphia, W. B. Saunders Company, 1952, p. 110. 3. Simonton, K. M.: Current treatment of sinusitis, *Journal-Lancet* 79:535, Dec., 1959.

Winthrop

LABORATORIES
New York 18, N. Y.



**How NALLINE helps to keep the lid
on drug addiction in California**

The use of the narcotic antagonist NALLINE, as a test of addiction, has significantly curtailed illicit narcotic traffic in Alameda County, California. In penal terms alone, three years after the institution of the test using NALLINE, prison admissions for addiction had dropped from 13.7% of total admissions to 4.4%.¹

The test was given to persons suspected of addiction and to addicts as a condition of probation or parole.

NALLINE does not cure addiction. It can, however, help addicts psychologically, because they know NALLINE detects relapse and that relapse leads to a return to prison or hospital. Definitive answers to the epidemiology of addiction—in itself a symptom of an underlying disease that may be psychologic, physiologic, or pharmacologic in nature—are, as yet, unknown.^{2,3}

The test should be undertaken only by physicians experienced in dealing with narcotic addicts.

Brief Summary: Indications: To reverse significant respiratory depression due to opiates. Diagnostic—to test for opiate narcotic addiction.

Side Effects, Precautions, and Contraindications: Do not use in mild or non-opiate

respiratory depression. Use with extreme caution and in small doses in narcotic addicts and in non-addicted patients receiving opiate narcotics due to risk of violent withdrawal symptoms. Effect gradually lost on successive doses which may result in respiratory depression. Untoward reactions include dysphoria, miosis, pseudoptosis, lethargy, drowsiness, sweating, pallor, nausea, psychotomimetic manifestations. Before prescribing or administering, read product circular with package or available on request.

Note: NALLINE will not precipitate abstinence symptoms in meperidine addicts unless they are taking 1,600 mg. or more daily. The ability of NALLINE to detect addiction to codeine is unknown.

1. Brown, T. T.: The Enigma of Drug Addiction, Springfield, Ill., Charles C Thomas, 1961, pp. 287-334. 2. Chesnick, R. D.: Med. Times 90:247 (March) 1962.

3. Narcotic Addiction Symposium: New York Med. 18:562 (August 20) 1962. Supplied: Ampuls of 1 and 2 cc. and vials of 10 cc., each cc. containing 5 mg. of nalorphine hydrochloride.

Note: The Federal Bureau of Narcotics now classifies NALLINE as a Class M. narcotic preparation. Thus, the purchase of this preparation no longer requires a Federal Narcotic Order Form.

NALLINE is a trademark of Merck & Co., Inc. MERCK SHARP & DOHME Division of Merck & Co., Inc., West Point, Pa.

INJECTION
NALLINE® HCl
NALORPHINE HCl INJECTION U.S.P.



Relieves Anxiety and Anxious Depression

The outstanding effectiveness and record of safety with which 'Miltown' (meprobamate) relieves anxiety and anxious depression has been clinically authenticated time and again during the past eight years. This, undoubtedly, is one reason why physicians still prescribe meprobamate more than any other tranquilizer in the world.

Miltown®
meprobamate



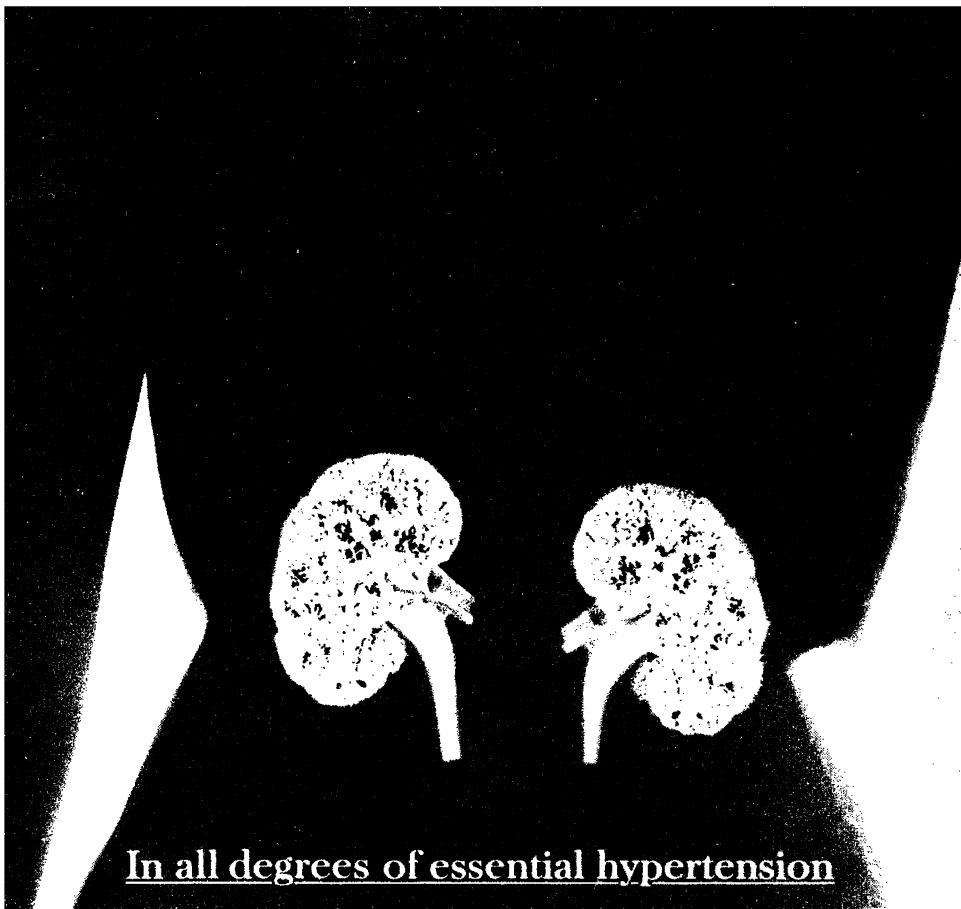
WALLACE LABORATORIES / *Cranbury, N. J.*

Product Information: 'Miltown' (meprobamate) is indicated in anxiety and tension states, and all conditions in which anxiety and tension are symptoms; in muscle spasm or tension; and in petit mal.

Slight drowsiness may occur with meprobamate and, rarely, allergic reactions. Meprobamate may increase effects of excessive alcohol. Use with care in patients with suicidal tendencies. Massive overdose may produce coma, shock, vasomotor and respiratory collapse. Consider possibility of dependence, particularly in patients with history of drug or alcohol addiction. Withdraw gradually after prolonged use at high dosage.

Usual dosage: 1 or 2 400 mg. tablets t.i.d.

Supplied: 400 mg. scored tablets, 200 mg. sugar-coated tablets; bottles of 50.



In all degrees of essential hypertension

Protect the kidneys and other threatened organs with **Rautrax-N** SQUIBB STANDARDIZED RAUWOLFIA SERPENTINA WHOLE ROOT AND BENDROFLUMETHIAZIDE WITH POTASSIUM CHLORIDE

When treatment of hypertension is effective, the danger of damage to the renal system is reduced.^{1,2} "Hypertensive patients suffer from vascular deterioration roughly proportional to the severity of the hypertension. . . . Reduction of blood pressure to normotensive levels reduces or arrests the progress of vascular damage with a resultant decrease in morbidity and mortality."¹ *Because Rautrax-N lowers blood pressure so effectively, it will provide this important protection not only for the kidneys but also for the heart and brain of your hypertensive patients.*

Rautrax-N—a combination of Raudixin, Squibb Standardized Rauwolfia Serpentina Whole Root, and the diuretic, Naturetin, Squibb Bendroflumethiazide—is effective in mild,⁴ moderate,^{3,4} or severe hypertension.^{3,5} For full information, see your Squibb Product Reference or Product Brief.

Supply: *Rautrax-N*—capsule-shaped tablets providing 50 mg. Raudixin, 4 mg. Naturetin, and 400 mg. potassium chloride. *Rautrax-N Modified*—capsule-shaped tablets providing 50 mg. Raudixin, 2 mg. Naturetin, and 400 mg. potassium chloride. Bottles of 100.

References: (1) Moyer, J. H., and Heider, C.: *Am. J. Cardiol.* 9:920 (June) 1962. (2) Brest, A. N., and Moyer, J. H.: *Pennsylvania M. J.* 63:545 (Apr.) 1960. (3) Hutchison, J. C.: *Current Therap. Res.* 4:610 (Dec.) 1962. (4) Berry, R. L., and Bray, H. P.: *J. Am. Geriatrics Soc.* 10:516 (June) 1962. (5) Feldman, L. H.: *North Carolina M. J.* 23:248 (June) 1962.

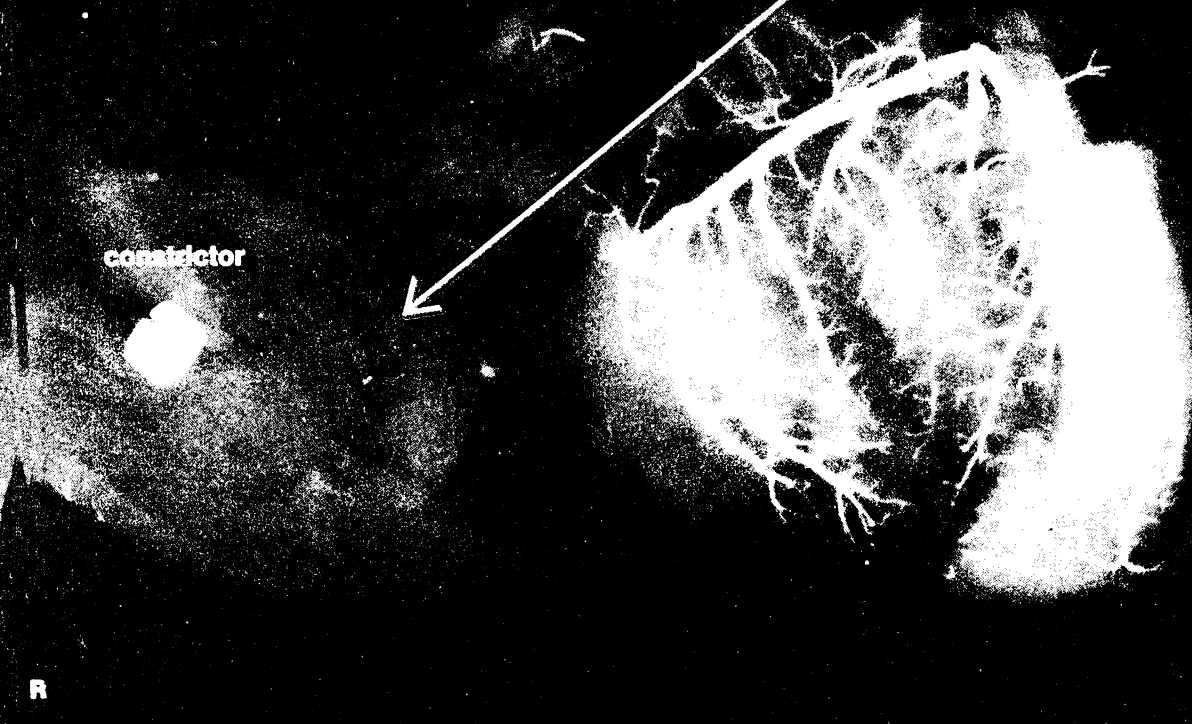
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SQUIBB
Squibb Quality
—the Priceless Ingredient
SQUIBB DIVISION **Olin**



**After induced
coronary
occlusion**

**Ischemia
Death**



This is the heart of a control (untreated) pig* that died after complete occlusion of the right coronary artery. As in the normal pig heart, there are virtually no connecting channels between right and left arterial systems...radiopaque dye injected into the left coronary artery does not cross into the right coronary system.†

This angiogram is typical of the radiographs of untreated hearts of pigs that died when gradual—but **complete**—occlusion of the right coronary artery was induced in 60 pigs.¹ Of the 30 control pigs, only five—16.7%—survived...

**...the first anatomic proof that a specific drug—
Peritrate [pentaerythritol tetranitrate]—can stimulate
development of collateral circulation after induced
occlusion of a main coronary artery**

*The pig was used in this study because coronary artery distribution in the pig—more than in the dog or other experimental animals—resembles that of man.^{2,3}

†To show the coronary arterial system in one plane, the heart was separated medially and opened like a book.

collateral circulation
Survival

**After induced
coronary
occlusion**

constrictor

This is the heart of a Peritrate [pentaerythritol tetranitrate]-treated pig that survived occlusion of a main coronary artery.¹ Extensive collateral circulation has developed, so that radiopaque dye injected into the left coronary artery fills the right coronary system.

Peritrate made this striking difference
in survival rate:**

five weeks after gradual, but **complete**, occlusion
Of the right coronary artery¹

Of 30 untreated (control) animals

survived

Of 30 Peritrate**-treated animals†

survived

In all Peritrate**-treated survivors, collateral circulation appeared to be greater than that found in untreated survivors.

**Basic therapy in coronary artery disease
—with or without angina**

Peritrate®
pentaerythritol tetranitrate

**...stimulates development of collateral
circulation¹...brings more blood and oxygen
to the myocardium safely**

Full dosage information, available on request, should be consulted before initiating therapy. **Side effects:** Negligible—but occasionally, transient headache may occur. **Precautions:** Exercise caution in glaucoma, and with dosage forms containing phenobarbital, which may be habit forming.

†Animals received Peritrate** orally in doses comparable to human doses.

**pentaerythritol tetranitrate

WARNER-CHILCOTT

Warner-Chilcott, Morris Plains, N. J.

Makers of Coly-Mycin Gelusil Mandelamine Proloid Tedral



References: 1. Based on Lumb, G., and Hardy, L. B.: Circulation (Pt. II Cardiovascular Surgery) 27:717, 1963. 2. Blumgart, H., et al.: Circulation 1:10, 1950. 3. Lumb, G., and Singletary, H.: Am. J. Path. 41:65, 1962.

Cytellin® (sitosterols, Lilly)

**the cholesterol-lowering agent
with an unparalleled record of
safety**

In the more than seven years that Cytellin has been in continuous use, no side-effects, drug tolerance, or incompatibilities have ever been reported. In addition, Cytellin does not accumulate in the blood or tissues or produce toxic manifestations.¹

Yet Cytellin is notably effective.

It has prevented hypercholesteremia and atherosclerosis in experimental animals² and actually caused regression of already formed atherosclerotic plaques.³ Furthermore, in extensive clinical studies, Cytellin has lowered elevated serum cholesterol in over 85 percent of cases *without* dietary restrictions.

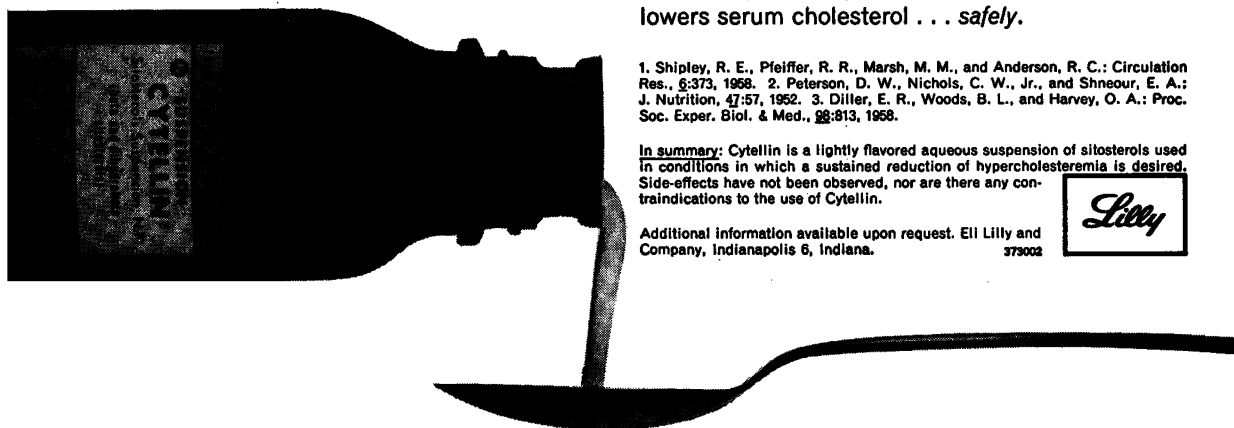
When a hypercholesteremic patient is in your office and safety is on your mind, specify Cytellin; it lowers serum cholesterol . . . *safely*.

1. Shipley, R. E., Pfeiffer, R. R., Marsh, M. M., and Anderson, R. C.: *Circulation Res.*, 6:373, 1958. 2. Peterson, D. W., Nichols, C. W., Jr., and Shneour, E. A.: *J. Nutrition*, 47:57, 1952. 3. Diller, E. R., Woods, B. L., and Harvey, O. A.: *Proc. Soc. Exper. Biol. & Med.*, 98:813, 1958.

In summary: Cytellin is a lightly flavored aqueous suspension of sitosterols used in conditions in which a sustained reduction of hypercholesteremia is desired. Side-effects have not been observed, nor are there any contraindications to the use of Cytellin.

Additional information available upon request. Eli Lilly and Company, Indianapolis 6, Indiana.

373002



Announcement

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CIRCULATION

May 23-24, 1963

To be held at

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IN DIARRHEAS



Patient: W. O. Age: 45 Sex: F Weight 96

Diagnosis: Functional diarrhea

Results: Definite

Side Effects: None

Comment: Patient has been on R-1132 (Lomotil) for fifteen months with definite improvement.

ACUTE

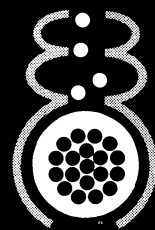
RECURRENT

CHRONIC

LOMOTIL[®] ANTIDIARRHEAL TABLETS / LIQUID

brand of Diphenoxylate Hydrochloride with Atropine Sulfate

P R O M P T · S A F E · E F F I C I E N T



LOMOTIL directly controls the *mechanism* of diarrhea. Therefore, it acts to give symptomatic relief in all diarrheas.

Lomotil promptly arrests acute diarrhea and controls chronic or refractory diarrhea with a high degree of safety.

Pharmacologic considerations indicate that Lomotil acts on the smooth muscle of the intestines and thus lowers the excessive propulsive motility responsible for increased fluidity and frequency of stools. This localized action makes Lomotil unusually free of secondary effects.

By reducing excess propulsive motility, Lomotil assures safe, selective symptomatic control of virtually all diarrheas.

Dosage: For adults the recommended initial dosage is two tablets (2.5 mg. each) three or four times daily. Lomotil

maintenance dosage may be as low as two tablets daily.

Lomotil is supplied as unscored, uncoated white tablets of 2.5 mg. and as liquid containing 2.5 mg. in each 5 cc. A subtherapeutic amount of atropine sulfate (0.025 mg.) is added to each tablet and each 5 cc. of the liquid to discourage deliberate overdosage. Recommended dosage schedules should not be exceeded.

Note: Lomotil is an exempt preparation under Federal narcotic statutes.

Detailed information and directions for use in children and adults are available in Physicians' Product Brochure No. 81. G. D. Searle & Co., P. O. Box 5110, Chicago 80, Illinois.

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**Tension?
Hypertension?
Control both with Serpasil®
(reserpine CIBA)**

Patients with high blood pressure plus one or more symptoms of tension—restlessness, rapid heart rate, excessive sweating, agitation—benefit from the distinctive calming action of Serpasil (reserpine). It shields the tense hypertensive patient from nervousness that raises his blood pressure. Result: pressure goes down, heart rate decreases. Useful in all grades of hypertension, either alone or as a background agent.

Average Dosage: 0.25 to 0.5 mg. daily.

Side Effects: Occasional: lassitude, drowsiness, nasal congestion, loose-

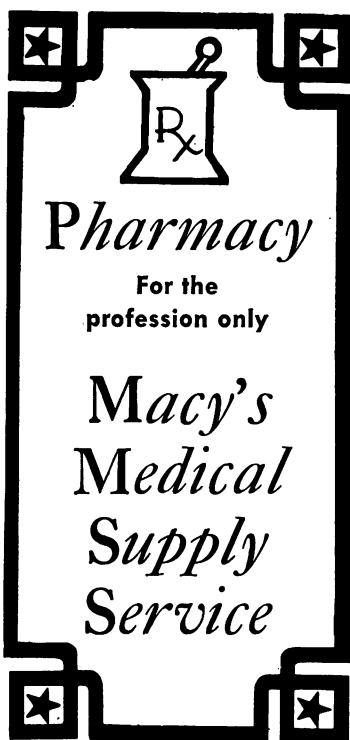
ness of stools, increased frequency of defecation. Rare: anorexia, headache, bizarre dreams, nausea, dizziness. Nasal congestion and increased tracheobronchial secretions may occur in babies of mothers treated with reserpine.

Cautions: Severe mental depression has appeared in a small percentage of patients, primarily in a dosage above 1 mg. daily. Usually the patient had a pre-existing, incipient, endogenous depression which was unmasked or accentuated by reserpine. When the drug is discontinued, depression usually disappears, but

hospitalization and shock therapy are sometimes required. Daily dosage above 0.25 mg. is contraindicated in patients with a history of mental depression or peptic ulcer. Withdraw Serpasil (reserpine) 2 weeks before surgery, if possible. For emergency surgical procedures, vagal blocking agents should be given parenterally to prevent or reverse hypotension and/or bradycardia.

Supplied: Tablets, 0.1 mg., 0.25 mg. and 1 mg.

C I B A
SUMMIT, N.J.



Our new Medical Service Department supplies generic items for physicians, hospitals, nursing homes and institutions. All products are labeled in compliance with regulations of the Federal Food and Drug Administration. All official drugs conform to the requirements of the U. S. P. or N. F. All Macy's-Own Brand products have been approved by Macy's-Own Bureau of Standards. There is no charge for delivery.

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Write for medical supplies and drug list

7 MACY'S RETAIL PRESCRIPTION DEPARTMENTS

serve your thrifty patients with speed and precision.

Over 2½ million Rx's already filled.

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Flavoring Improves Palatability of Acidophilus Milk



In the treatment of acne vulgaris and such gastro-intestinal disorders as simple chronic constipation and simple diarrhea, patient resistance to ingestion of Acidophilus may be controlled if flavor is improved by stirring 1 to 2 teaspoons of Jell-O powder into each glass of Acidophilus Milk before serving. Most popular flavors are raspberry, cherry, orange-pineapple, blackberry, and strawberry. For patients on low-calorie diets, substitute D-Zerta for Jell-O. Add a few drops of Sweeta or Sweet-10 to the flavored Acidophilus for a sweeter drink.

WALKER-GORDON ACIDOPHILUS

2% butterfat, made from Walker-Gordon Certified Milk cultured with 300-500 million acidophilus bacilli per ml. Available through leading milk dealers.

WALKER-GORDON CERTIFIED MILK FARM, Plainsboro, N. J.

SWinburne 9-1234 (N. Y. Walker 5-7300; Phila. Pennypacker 5-3465)



In Sprains, Strains and Muscle Spasm, 'Soma' Compound

numbs the pain...not the patient

**A potent analgesic and
a superior muscle relaxant**

1. A sprain or fracture is not a big clinical problem—but it does hurt. And if there is housework to do and kids to mind, the patient needs something to numb the pain.

2. A.P.C. compounds have limited usefulness; and the patient can buy them without your prescription. Unfortunately, most of them are too mild to be effective for sprains—and more potent products too often make the patient feel 'dopey'.

3. 'Soma' Compound is ideal in these cases. Since it contains both 'Soma' (carisoprodol) and acetophenetidin it is both a potent analgesic and a superior muscle relaxant; it also contains caffeine to offset any drowsiness (*"numbs the pain...not the patient"*).

4. Why not try 'Soma' Compound? Dosage is

1 or 2 tablets q.i.d. For more severe pain, try 'Soma' Compound+Codeine. Dosage: 1 or 2 tablets q.i.d.

5. Hypersensitivity to carisoprodol may occur rarely. Codeine may produce addiction, nausea, vomiting, constipation or miosis.

Soma[®] Compound ●

carisoprodol 200 mg., acetophenetidin 160 mg., caffeine 32 mg.

Soma[®] Compound+Codeine ●

carisoprodol 200 mg., acetophenetidin 160 mg., caffeine 32 mg.,
codeine phosphate 16 mg. (Warning—may be habit forming.)

WALLACE LABORATORIES / Cranbury, N. J.



Coca-Cola, too, is compatible with a well-balanced menu. As a pure, wholesome drink, it provides a bit of quick energy... brings you back refreshed after work or play. It contributes to good health by providing a pleasurable moment's pause from the pace of a busy day.

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to control infection
throughout the urinary system

Furadantin® nitrofurantoin

permeates renal tissue...

to control infection and
preserve vital structure
and function

fast-acting—specific affinity for the urinary tract; antibacterial concentrations in the urine within 30 minutes. **wide-acting**—bactericidal against a broad range of pathogens, including certain organisms now resistant to sulfonamides and antibiotics. **permeates all parts of the nephron** with a

3-component system of transport.^{1,2,8} **minimal resistance problems** in over a decade of clinical use. **no superinfection**—monilial superinfection, staphylococcal enteritis, proctitis and anovular pruritus have not been reported. **no crystalluria**—soluble over a pH range of 3.6 to 7.3. **well tolerated**—tolerance is enhanced by the simple expedient of taking with meals, and with food or milk on retiring. **no cross resistance or cross sensitization with other drugs.**

SUPPLIED: FURADANTIN (nitrofurantoin) TABLETS 50 and 100 mg. FURADANTIN (nitrofurantoin) ORAL SUSPENSION contains 25 mg. FURADANTIN (nitrofurantoin) per 5 cc. teaspoonful suspended in a water-miscible, palatable gel composed of glycerol 42%, alcohol 10%, magnesium aluminum silicate, propionic acid, methylparaben, flavoring and water.

1. Buzard, J. A., et al.: Amer. J. Physiol. 202:1136, 1962.
2. Woodruff, M. D., et al.: J. A. M. A. 175:1132, 1961.
3. Paul, M. F., et al.: Amer. J. Physiol. 197:580, 1959.

relation of structure to function—A huge filtration surface is presented by the thin, porous walls of the tortuous capillaries. The epithelial cells (podocytes) do not provide a continuous covering, but support the capillary loops by means of delicate, footlike extensions. Only the basement membrane appears to stand intact between the blood and the glomerular filtrate. Recently, however, other extremely fine "ultramembranes" have been detected covering the capillary pores, and bridging the clefts between the feet of the podocytes.

References on electron microscopy of the nephron: Rhodin, J., in: Renal Disease (edited by D. A. K. Black), F. A. Davis Company, Philadelphia, 1962/Ham, A. W., and Leeson, T. S.: Histology, J. B. Lippincott Company, Philadelphia, 1961/Rhodin, J.: Int. Rev. Cytol. 7:485, 1958/Pease, D.C.: Anat. Rec. 121:723, 1955/Pease, D.C.: J. Histochem. Cytochem. 3:295, 1955.

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ultrastructure of the renal glomerulus based on electron micrographs

